

## SHORT COMMUNICATION

# A NEW SPECIES OF *ERIGONOPLUS* (ARANEAE, LINYPHIIDAE) FROM CRIMEA, UKRAINE

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**ABSTRACT.** A new species of *Erigonoplus*, *E. galophilus*, is described from eastern Crimea, Ukraine.

**Keywords:** *Erigonoplus galophilus*, taxonomy, description

The linyphiid spider genus *Erigonoplus* Simon 1884 currently contains 19 species (Platnick 2004). The majority of these are rare and known only from single specimens (Dimitrov 2003; Eskov 1986; Eskov & Marusik 1997; Miller 1971; Millidge 1975; Millidge 1979; Tanasevitch 1989; Tanasevitch 1990; Thaler 1991; Wunderlich 1995). Species of *Erigonoplus* have been found in dry warm open places where they hide under stones or at the base of vegetation (Eskov 1986; Eskov & Marusik 1997; Miller 1971; Tanasevitch 1990; Thaler 1991; Wunderlich 1995). The distribution of the majority of *Erigonoplus* species is associated with the Ancient-Mediterranean region from Spain to Central Asia, with four exceptions: *E. globipes* (L. Koch 1872) has a Palearctic distribution; *E. justus* (O. P.-Cambridge 1875) occurs in Belgium; and *E. minaretifer* Eskov 1986 and *E. sibiricus* Eskov & Marusik 1997 occur in East and South Siberia. Recent collecting in eastern Crimea, Ukraine has revealed a new species of this genus, which is here described.

The materials examined for this study are deposited in the collection of Zoological Museum of Moscow State University (ZMMU), the Zoological Department of Sumy State Teacher’s Training University (SSTTU) and in the author’s private collection (VGC). The following abbreviations were utilized: E = embolus; Em = embolic membrane; M = membrane; P = paracymbium; Pt = protégulum; PTA = pedipalpal tibial apophysis; R = radix; St = subtegulum; T = tegulum; Tm = position of metatarsal trichobothria; TP = radical tailpiece.

### TAXONOMY

Family Linyphiidae Blackwell 1859  
Genus *Erigonoplus* Simon 1884

**Type species.**—*Erigone inclara* Simon 1881.

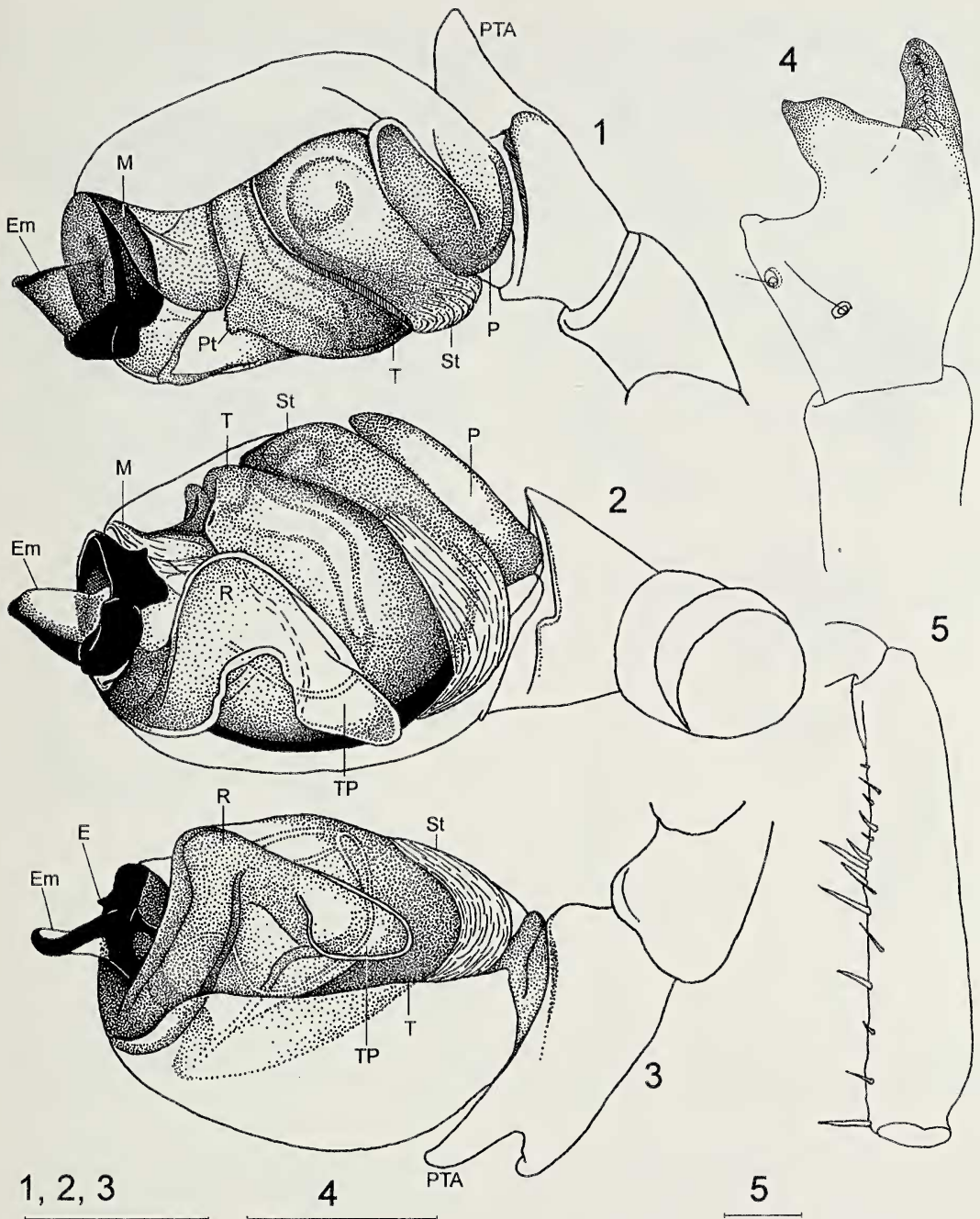
**Remarks.**—Species of *Erigonoplus* are generally small spiders with a total length of usually 1.2–1.8 mm, but one species (*E. simplex* Millidge 1979) is

2.45 mm; palpal tibia with 3 apophyses, dorso-lateral, dorsal, and lateral, the latter with a single trichobothrium. The embolic division has a strongly curved radix which has a large section turned aside from the body axis and which ends with a complex, strongly sclerotized distal piece. The male carapace varies from no elaboration or extension of the cephalic region [*E. inclarus* (Simon 1881), *E. inspinosus* Wunderlich 1995, *E. nobilis* Thaler 1991, *E. setosus* Wunderlich 1995 and *E. simplex*] to those forms with a strongly raised cephalic region [*E. castellanus* (O. P.-Cambridge 1875), *E. globipes*, *E. jarmilae* (Miller 1943), *E. justus*, *E. kirghizicus* Tanasevitch 1989, *E. minaretifer*, *E. nigrocaeruleus* (Simon 1881), *E. sibiricus* and *E. turriger* (Simon 1881)]. The male femur I either lacks setae (*E. inspinosus*) or bears a row of stout spines on its anterior surface. The tibial spinal formula varies from 0:0:0:0 (*E. minaretifer* and *E. sibiricus*) to 2:2:1:1 (*E. castellanus*, *E. inspinosus*, *E. simplex*) with the majority of species having a tibial spinal formula of 1:1:1:1. The abdomen of many species is coriaceous or has a poorly delimited scutum (*E. minaretifer*).

### *Erigonoplus galophilus* new species Figs. 1–5, 8–11

**Material examined.**—Holotype male, allotype female, bank of Baracol salt lake, 12 km WSW of Pheodosia, eastern Crimea, Ukraine, 45°00'N, 32°14'E, 27 April 2003, V. Gnelitsa (ZMMU). Paratypes: 5 males, 4 females, same data (SSTU); 1 male, 1 female, same data (VGC); 1 female, same data except 16 October 2003 (VGC).

**Diagnosis.**—*Erigonoplus galophilus* appears to be most similar to *E. spinifemoralis* Dimitrov 2003 based upon the morphology of the palp (see Figs. 6, 7 for comparative figures). Males of *E. galophilus* differ from other *Erigonoplus* species by the tibial spine formula of 0:1:1:1; the stout ventral spines and their location on femur I; the shape of

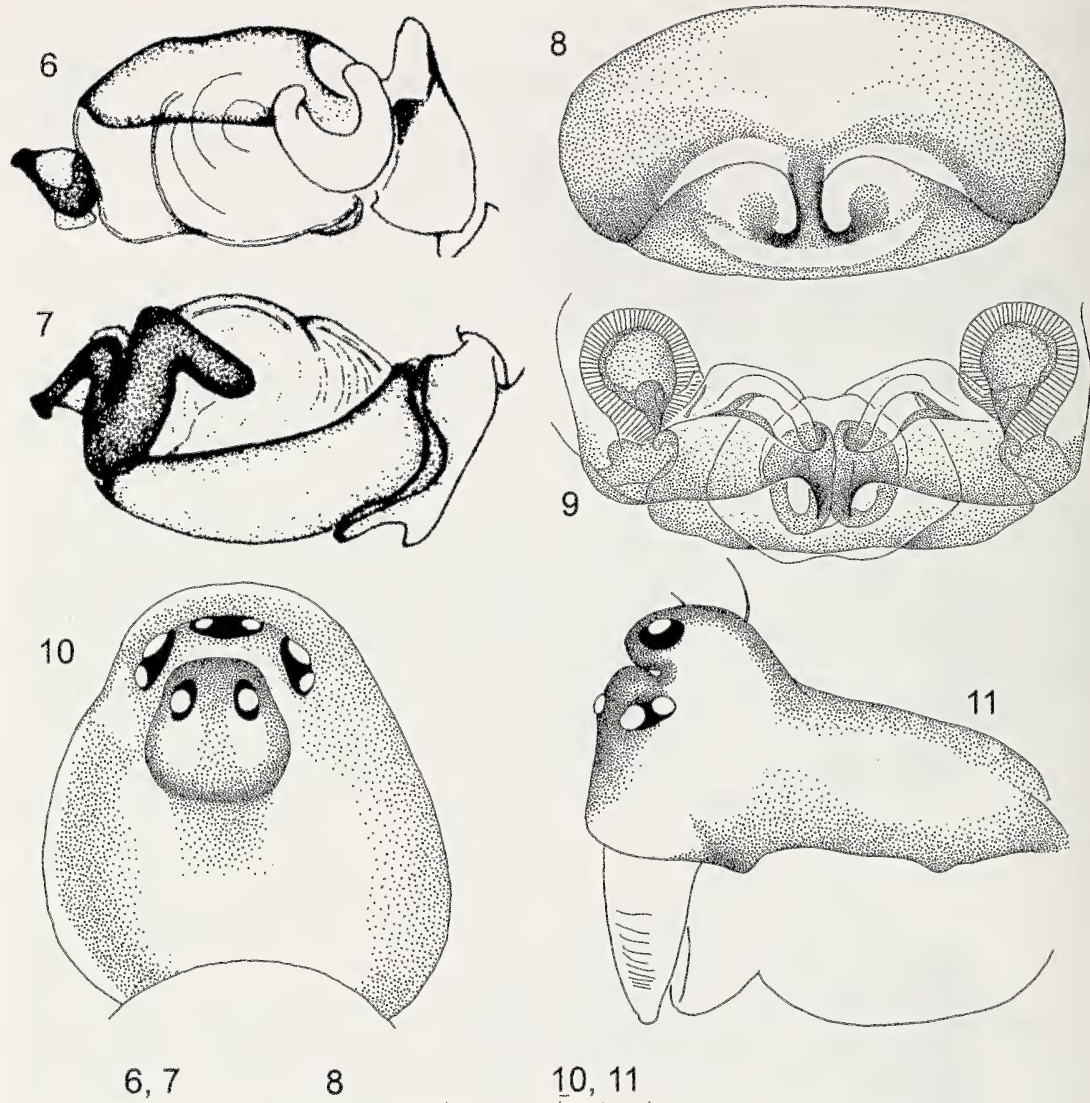


Figures 1–5.—*Erigonoplus galophilus* new species: 1. Left palp, ectal; 2. Left palp, ventral; 3. Left palp, mesal; 4. Left palpal tibia, dorsal; 5. Male femur I, lateral. Scale lines = 0.1 mm.

palpal tibia and the configuration of the palp particularly by the shape and proportions of radix and radical tailpiece as well as the form of distal part of embolic division. Females differ from other species of *Erigonoplus* by the wide epigynum with narrow longitudinal partition reaching the center of the epigynum.

**Description.**—*Male*: Total length 1.47; carapace (Fig. 10, 11) yellow-gray; length 0.62; width 0.53; sternum: length 0.40; width 0.38; covered with scattered long thin setae; eyes: width between the posterior median eyes is twice the PME diameter. Leg lengths: leg I: femur 0.52, patella 0.17, tibia 0.43, metatarsus 0.42, tarsus 0.29; leg II: femur 0.48, pa-





Figures 6–11.—6, 7. *Erigonoplus spinifemoralis* (from Dimitrov 2003): 6. Right palp, ectal; 7. Right palp, mesal. 8–11. *Erigonoplus galophilus* new species: 8. Epigynum, ventral; 9. Vulva; 10. Male carapace, lateral; 11. Male carapace, dorsal. Scale lines = 0.1 mm.

tella 0.17, tibia 0.38, metatarsus 0.42, tarsus 0.27; leg III: femur 0.43, patella 0.15, tibia 0.31, metatarsus 0.32, tarsus -; leg IV: femur 0.59, patella 0.18, tibia 0.50, metatarsus 0.48, tarsus 0.29; femur I ventrally with strong setae (Fig. 5); tibial spines 0:1:1:1; TmI 0.45; TmIV absent. Abdomen: black with two brown chitinous sigillae; covered with long setae. Palp (Figs. 1–3): radix with large tail-piece and massive heavy sclerotized curved distal part, embolus short and barely visible, a wide embolic membrane with strongly sclerotized outer margin; palpal tibia (Fig. 4) with 3 apophyses.

*Female*: Total length 1.61; carapace dark brown, length 0.59; width 0.53; sternum: length 1.32; width

1.10; dark brown; eyes: posterior median eyes are one diameter PME apart. Legs: leg I: femur 0.50, patella 0.17, tibia 0.42, metatarsus 0.36, tarsus 0.27; leg II: femur 0.45, patella 0.17, tibia 0.36, metatarsus 0.34, tarsus 0.27; leg III: femur 0.41, patella 0.17, tibia 0.30, metatarsus 0.31, tarsus 0.24; leg IV: femur 0.59, patella 0.17, tibia 0.48, metatarsus 0.42, tarsus 0.28; tibial spines 1:1:1:1; TmI 0.46; TmIV absent. Abdomen: black without chitinous sigillae. Epigynum (Fig. 8) 3.5 times broader than long, narrow central part with parallel margins curved aside in the hind pieces nearly at the center of epigynum, vulva (Fig. 9).

*Ecology*.—The specimens were all collected us-

ing a hand-held suction sampler in detritus and on the soil within the strip of *Salicornia* on the banks of the salt lake.

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